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| 10/553,575 | 09/26/2006 | Benjamin Firooz Ghassabian | GHASSABIAN12 | 7464 |

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BROWDY AND NEIMARK, P.L.L.C.
624 NINTH STREET, NW
SUITE 300
WASHINGTON, DC 20001-5303

| EXAMINER |
|---|
| LAM, VINH TANG |

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

| | Application No. | Applicant(s) |
|---|---|---|
| **Office Action Summary** | 10/553,575 | GHASSABIAN, BENJAMIN FIROOZ |
| | **Examiner** | **Art Unit** | |
| | VINH T. LAM | 2629 | |

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)☒ Responsive to communication(s) filed on <u>09 February 2009</u>.

2a)☐ This action is **FINAL.**     2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)☒ Claim(s) <u>1-34</u> is/are pending in the application.

    4a) Of the above claim(s) <u>1-23</u> is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _____ is/are rejected.

7)☐ Claim(s) <u>24-34</u> is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

## Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>17 October 2005</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date <u>10/17/2005</u>.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

## DETAILED ACTION

### *Response to Election/Restrictions*

1.      Claims **1-23** are withdrawn from further consideration pursuant to 37 CFR

1.142(b) as being drawn to a nonelected Groups **1-3**, there being no allowable

generic or linking claim. Election was made **without** traverse in the reply filed on

02/09/2009.

2.      Applicant's election **without** traverse of Group **4** (Claims **24-29**) and

Claims **30-32** in the reply filed on 02/09/2009 is acknowledged.

3.      Newly added Claims **33** and **34**.

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the **second paragraph** of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4.      Claim **24** recites the limitations, "the input means" in the first line of the

first paragraph, "the letters" in the first line of the second paragraph, "the system"

in the fourth line of the third paragraph, and "said sequence" in the fourth line of

the third paragraph. There are insufficient antecedent basis for these limitations

in the claims.

5.      Claim **30** recites the limitation, "said first text components" in the first line

of the third paragraph, and "the second group of text components" in the fifth line

of the fourth paragraph. There are insufficient antecedent basis for these

limitations in the claims.

6.      Claims **31** and **32** recite the limitation, "said second group of text

components" in the fifth line of the fourth paragraph. There is insufficient

antecedent basis for this limitation in the claim.

        To further advance prosecution, the Examiner interprets the above

limitations, respectively, as "a plurality of input means", "a plurality of the

alphabet letters", "the data entry system", "a sequence", "the first type of text

components", and "the second type of text components" (for Claims 30-32).


7.      Claim **24** is rejected under 35 U.S.C. 112, second paragraph, as being

indefinite for failing to particularly point out and distinctly claim the subject matter

which applicant regards as the invention.

            The limitation of Claim **24** "…the system compares said sequence

of **input signals** with the **input signals** corresponding to each of at least some

of said words …." is not clear.

        What are the differences between the **sequence of input signals** and the

**input signals** corresponding to each of at least some of said words?

        How does the system compare **input signals** with the **input signals**

corresponding to each of at least some of said words; comparing the input

signals among themselves? For example, the input signals are the sequence of

"c", "o", and "m", the system compares each of the letters "c", "o", and "m" against

the others? Or the system compares the combination of the letters "c", "o", and

"m" to other combinations previously stored to predict the next input signals for

determining user's choice of a word?

To further advance prosecution, the Examiner interprets the above

limitation as "… the system compares said sequence of current **input signals**

with the previously stored **input signals** corresponding to each of at least some

of said words …."

Appropriate correction is required.

### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35

U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8.      Claims **24-27** and **30-32** are rejected under 35 U.S.C. 102(b) as being

anticipated by **Vale (US Patent No. 6359572).**

Regarding Claim **24**, (Original) **Vale** teaches a data entry system

(*20*) comprising:

a number of predefined input signals (*i.e. commands and information,* Col.

**3**, Ln. **9**) provided by interacting with the input means (*i.e. 32, 34, and 36* of FIG.

**1**) of an object including predefined types of interaction (*i.e. touch-sensitive,*

*audio, and physical,* Col. **3**, Ln. **11-14**) provided with a number of keys such as

physical (*i.e. keyboard 36,* Col. **3**, Ln. **14**, FIG. **2**) or virtual keys (*i.e. touch-*

*sensitive display 32,* Col. **3**, Ln. **11**), corresponding to an electronic device for at

least entering arbitrary characters (Col. **3**, Ln. **5-14**, FIGs. **1** & **2**) wherein,

said data entry system uses a number of symbols including at least the

letters of the alphabet of at least one language (*i.e. inherent for Vale's keyboard

and touch-sensitive display*) and wherein said symbols are assigned to said input

signals such that at least two of said letters are assigned to at least one of said

input signals (*i.e. inherent in MS Word* [TM] *Customize Keyboard, e.g. "Ctrl+A+C"

may be assigned to turn lower case letters into upper case letters*) and wherein,

said data entry system uses a number of words (*i.e. inherent in MS Word*

[TM] *English Language, e.g. the words "to" and "be"*) wherein each of said words is

composed of at least one of said symbols (*i.e. inherent, for Vale's keyboard e.g.

the symbols "t" and "o"*), wherein in order to enter one of said words a user

provides at least the input signals corresponding to the symbols of said word

(Col. **16**, Ln. **53-68**, FIGs. **11** & **12**) and the  system compares said sequence of

input signals with the input signals corresponding to each of at least some of said

words and proposes a corresponding word (Col. **15**, Ln. **17-25**, FIG. **8**) and

wherein,

at least the input means to which said letters are assigned are split into

two groups wherein each group is used by the finger of a different user's hand

(*i.e. inherent, e.g. the groups "ASDFG" and "HJKL;" are groups of keys used by

the Left and Right hands respectively*).

Regarding Claim **25**, (Original) **Vale** teaches the data entry system

according to claim 24, wherein at least the input means to which said letters are

assigned are split into two groups and are disposed on opposite sides of an

electronic device (*i.e. inherent, e.g. the groups "ASDFG" and "HJKL;" letters are

*arranged to the Left and Right sides of the keyboard respectively*).

      Regarding Claim **26**, (Original) **Vale** teaches the data entry system

according to claim 24, wherein further a symbol assigned to an input signal is

entered by a procedure of input including:

providing said input signal (Col. **16**, Ln. **41-46**, FIG. **11**); and

providing a speech information corresponding to said symbol for selecting

said symbol among the symbols that are assigned to said input signal (Col. **4**, Ln.

**21-26**, FIGs. **2 & 6**), wherein said speech information is detected and analyzed

based on at least one of a user's voice (Col. **4**, Ln. **55-65**, FIG. **2**) and a user's lip

movements.

      Regarding Claim **27**, (Original) **Vale** teaches the data entry system

according to claim 24, wherein a further symbol assigned to an input signal is

entered by a procedure of input including:

providing said input signal (Col. **16**, Ln. **41-46**, FIG. **11**); and

providing a speech information corresponding to said symbol for selecting

said symbol among the symbols that are assigned to said input signal , wherein

said speech information is detected and analyzed based on at least one of a

user's voice (Col. **4**, Ln. **55-65**, FIG. **2**) and a user's lip movements; and

wherein said data entry system uses at least one database of words such

that in order to enter a word of said a least one database (*i.e. table stores values*

*of the keys,* Col. **15**, Ln. **11**-**12**) a user uses one of at least a first and a second methods of input (Col. **15**, Ln. **8**-**16**, FIG. **8**), wherein:

a first method of input includes combining information corresponding to said word (Col. **15**, Ln. **26**-**30**, FIG. **8**), wherein said combined information includes:

a first information including entering at least one character such as a letter of said word through said procedure of input (Col. **15**, Ln. **8**-**11**, FIG. **8**); and

a second information including providing the input signals corresponding to at least some of the other characters of said word without providing speech (Col. **15**, Ln. **26**-**27**, FIG. **8**);

a second method of input includes providing information including the input signals corresponding to substantially all of the characters of said word without providing a speech (Col. **16**, Ln. **53**-**62**, FIG. **12**), wherein the system compares said information with the information corresponding to the words of said database and proposes a corresponding word (Col. **17**, Ln. **1**-**22**, FIGs. **13**-**15**).

Regarding Claim **30**, (Original) **Vale** teaches a data entry system (*20*) comprising;

a number of predefined input signals (*i.e. commands and information*, Col. **3**, Ln. **9**) provided by interacting with the input means (*i.e. 32, 34, and 36 of FIG. 1*) of an object, including predefined types of interaction (*i.e. touch-sensitive, audio, and physical ,* Col. **3**, Ln. **11**-**14**) provided with a number of keys, such as physical (*i.e. keyboard 36,* Col. **3**, Ln. **14**, FIG. **2**) or virtual keys (*i.e. touch-*

*sensitive display 32,* Col. **3**, Ln. **11**), corresponding to an electronic device for at
least entering arbitrary characters (Col. **3**, Ln. **5-14**, FIGs. **1** & **2**) wherein,

said data entry system uses a first type of text components including at
least the letters of the alphabet of at least one language (*i.e. inherent for Vale's
keyboard, touch-sensitive display, and voice recognition to have at least one
letter of the alphabet of at least one language*) and a second type of text
components generally each including a portion of a word, such as a chain of
characters generally corresponding to a syllable of a word of a language (Col. **15**,
Ln. **26-27**, FIG. **8**), wherein

said first text components are assigned to said input signals such that at
least two of said letters are assigned to at least one of said input signals (*i.e.
inherent in MS Word* [TM] *Customize Keyboard, e.g. "Ctrl+A+C" may be assigned
to turn lower case letters into upper case letters*), and wherein a text component
of the second group of text components is entered by a procedure of input
including:

providing the input signals corresponding to at least two of its characters
(*i.e. inherent for a voice recognition device*); and

providing a speech information corresponding to said text component for
selecting said text component among the text components that are represented
by said provided input signals (Col. **4**, Ln. **21-26**, FIGs. **2** & **6**), wherein said
speech information is detected and analyzed based on at least one of a user's
voice (Col. **4**, Ln. **55-65**, FIG. **2**) and a user's lip movements.

Regarding Claim **31**, (Original) **Vale** teaches the data entry system according to claim 30, wherein said second group of text components include the word of a language having one syllable (*i.e. inherent for Vale's Keyboard to have a word of language to have one syllable, e.g. English*).

Regarding Claim **32**, (Original) **Vale** teaches the data entry system according to claim 30, wherein said second group of text components includes portions of a word, where said portions of a word have more than one syllable (*i.e. inherent for Vale's Keyboard to have a word of language to have one syllable, e.g. English*).

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9.　　　Claims **29**, and **33-34** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Vale (US Patent No. 6359572).**

Regarding Claim **29**, (Original) **Vale** teaches the data entry system according to claim 24, Vale does not teach wherein substantially all of said letters are assigned to four of said input signals.

However, as to substantially all of said letters are assigned to four of said input signals is an obvious Design Choice, because the number of letters

that are assigned to a key or button depending on once choice or preference, and also cost, and size. For example, a keyboard has "!" and "1" assigned to one key, one the other hand, a cell phone has "2", "a", "b", and "c" designated to one key.

Regarding Claim **33**, (New) **Vale** teaches the data entry system according to claim 25.

**Vale** does not teach the input means to which the letters are assigned consists of four keys and wherein each of said two groups includes two of said four keys.

However, it would have been an obvious **choice of design** for the input means to which the letters are assigned consists of four keys and wherein each of said two groups includes two of said four keys are, because the number of letters that are assigned to a key or button depending on its application, cost, and size. For example, a keyboard has "!" and "1" assigned to one key, one the other hand, a cell phone has "2", "a", "b", and "c" designated to one key.

Regarding Claim **34**, (New) the data entry system according to claim 33, wherein **Vale** teaches said data entry system includes a database of words and said letter keys are used in a word predictive text entry system based on key presses corresponding to the letters of a word provided by the user (Col. **15**, Ln. **17-25**, FIG. **8**).

10.    Claim **28** is rejected under 35 U.S.C. 103(a) as being unpatentable over

**Vale (US Patent No. 6359572)** in view of **Pratley et al. (US Patent No.**

**6356866).**

        Regarding Claim **28**, (Original) **Vale** teaches the data entry system

according to claim 24.

        However, **Vale** does not teach that at least the letters having ambiguously

resembling speech are separately from each other assigned to different input

signals.

        In the same field of endeavor, **Pratley et al.** teach that at least the letters

having ambiguously resembling speech are separately from each other assigned

to different input signals (Col. **1**, Ln. **58-68**).

        It would have been obvious to a person having ordinary skill in the art at

the time the invention was made to combine **Vale** teaching of data entry system

comprising input signals with input means, symbols or letters of the alphabet,

uses a number of words, and letters being split into two groups with **Pratley et al.**

teaching of at least the letters having ambiguously resembling speech are

separately from each other assigned to different input signals in order to benefit

of a time saving and shortcut interfacing by having the data entry system

comprising input signals with input means, symbols or letters of the alphabet,

uses a number of words, wherein letters being split into two groups, and at least

the letters having ambiguously resembling speech are separately from each

other assigned to different input signals.

### *Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Chadha; Lovleen (US Patent No. 7218249).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to VINH T. LAM whose telephone number is (571)270-3704. The examiner can normally be reached on M-F (7:00-4:30) EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amare Mengistu can be reached on (571) 272-7674. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/VTL/

/Amare  Mengistu/
Supervisory Patent Examiner, Art Unit 2629